# **NEVADA CLIMATE SUMMARY**

Office of the State Climatologist

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STATE PUBLICATIONS

AUGUST 1994 VOLUME 13, NUMBER 8 John W. James
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#### SYNOPSIS

Was Summer 1994 as hot as it seemed? Was it ever! In Reno, with records beginning 107 years ago, August 1994 was the 3rd warmest 8th month on record, with an average temperature of 73.7 degrees, for a departure of +4 degrees. Only 1939 (74.3) and 1931 (74.2) had hotter Augusts. This coupled with an unusually hot June and July, gave a total summer departure from average of +13 degrees. Only Summer 1931 was hotter, with an 18 degree departure.

A similar story can be told about Las Vegas, where the 92.9 degree average (+4 degrees from normal) was the hottest August in 88 years of combined Airport and Downtown records, just edging out August 1962 by 0.7 degrees. With a hot June and July the Summer 1994 departure from average temperature was 12 degrees, the same as the "infamous inferno" of Summer 1931, when 118 degrees was recorded in Downtown Las Vegas and +106 in Reno. Both temperatures are still the hottest of record.

The following quote is taken from the Nevada Section of the U.S. Climatological Data that puts July 1931 in perspective, and sounds like it could be 1994!

"Drought conditions continue severe. In a few places a second crop of alfalfa was harvested, but on many projects the water on hand did not serve to mature a second crop. Much grain was cut for fodder. Gardens and the potato crop were largely destroyed. Streams and springs failed and ranges deteriorated. Near the close of the month many ranchers were buying feed for their stock or preparing to ship them to pastures out of the State."

So welcome back 1931 conditions- HOT, HOT, HOTTER, DRY, DRY, DRIER!

The remainder of Nevada also experienced a warm August and summer, but conditions were not so desiccating in the eastern portion of the State.

### **TEMPERATURE**

Temperatures averaged well above normal in August in the South and Far West, with departures of 4-5 degrees. Most of the remainder of Nevada experienced temperatures a little above normal for the month, with a portion of the Lower Humboldt area a little cooler than normal.

Extreme values ranged from near 120 degrees in the Colorado River/Lake Mead area to the high 20's in some Northeast and Central high valleys. For example Overton and Laughlin had 119 degrees, and Echo Bay and Callville Bay reached 118 degrees early in the month, while Wildhorse Reservoir dropped to 27 and 28's were record at San Jacinto, McDermitt and Mtn City. Reese River Valley had 29 at month's end. State records for August are 121 at Cottonwood Cove (1992), and 10 at San Jacinto and Charleston also in 1992.

#### **PRECIPITATION**

Many locations had no rainfall this month. This was especially true in the West, where in many areas Summers 1993 and 1994 have been the two driest back to back summers on record. This coupled with 7 of the last 8 Water Years being below normal, has caused range and forest environments to be the driest in recorded history, with several large fires burning this summer costing many millions of dollars.

Scattered, but locally intense thunderstorms supplied what moisture was available in August, with 2.77" at Snowball Ranch (1.58" on the 10th), 2.20" at Lehman Caves in Great Basin National Park (177% of normal) and 1.84 at Pioche (151% of normal).

In addition, Kyle Canyon had 4.12" (1.38 on the 14th), North Spring Valley had 2.26", Eureka 1.53" (156% of normal) and Pioche Lister 1.31". Ten rainy days at Great Basin N.P. and Pioche were unusually high. An early months deluge brought as much as .98" in 15 minutes in the Las Vegas area on August 8th, with some localized flooding.

Water Year 1994 totals (Oct 1, 1993-Sept. 1, 1994) now range from only 45-55% of normal in the West and South to 95-100% of normal in East Central Nevada. The remainder of the State is in the 70-80% of normal range.

#### SUNSHINE, WIND & EVAPORATION

The number of sunshine hours in the Northern half of the State was unusually high in August. In fact, Reno (97% of the possible hours) and Winnemucca (99% of the possible hours) set all-time records for sun hours. In the South it was cloudier than usual, with only 80% of the possible hours at Las Vegas.

Wind speeds averaged above normal in the South, but a little below normal elsewhere.

Evaporation was above normal Statewide with 20.67" at Silverpeak, 16.23 at Overton, 14.66" at Pahrump, 12.44" at Honey Lake, 12.19" at University of Nevada, 11.73 at Fallon, 11.50 at Pahranagat NWR, 10.20" at Ruby Lake, 9.98" at Beowawe Gund, 9.75" at Minden, ANd 6.89" at Shoshone.

John W. James State Climatologist

## 1993-94 STORAGE GAGE CATCHES

Over 50 storage precipitation gages are located at higher elevations in the State. These sites are visited once each year in the summer, measured and then charged with oil and anti-freeze to prevent evaporation and to keep the precipitation catch liquid so it will not cap over the gage and be lost. Such gages give valuable information about areas that are not inhabited but are very important in understanding Nevada's water availability.

The 1993-94 Water Year was drier than normal over all but a small portion of East Central Nevada, where totals were slightly above normal. A regional breakdown indicates that gages in the Northeast mountains averaged about 85% of normal, Central Nevada 80%, the South 60%, and the West only 50% of normal. The wettest location was in the Ruby Mountains at Angel Lake, south of Wells at the 8320 foot level, with 32.95", or 93% of the 35.27" normal. Coon Creek Summit (at 8300') near Jarbidge had 24.60", or 72% of the normal 34.32". The highest percent of normal this season was at White Horse Pass south of Wendover, where 10.00" fell, or 118% of the 1961-90 normal of 8.43". On the dry side, only 2.20" fell at Bunkerville Mtn. in Southern Nevada (35% of normal), with 2.50" (40% of normal) at McCullough Pass south of Las Vegas.

# STORAGE GAGE INDEX

Storage Gage Number	Location	1961.90 Averages	1002 04 Cassan
1	Coon Creek Summit	<u>1961-90 Averages</u> <u>34.32</u>	1993-94 Season
2	Pratt Creek	17.55	24.60 9.60
2 3	Hanks Creek		
4	West Fork Beaver Creek	10.28	8.60
5		13.54	9.00
	Jacks Creek Pass	32.00	21.95
6	California Creek	12.89	8.30
7	Willow Creek Summit	12.88	11.40
8	Adobe Summit	14.62	9.10
9	Angel Lake	35.27	32.95
10	Soldier Creek	All and the state of the state	17. <b>7</b> 0
11	Rattlesnake Creek	22.43	20.40
12	Harrison Pass	16. <b>7</b> 8	MISSING
13	White Horse Pass	8.43	10.00
14	Sadler Ranch	8.90	8.75
15	Limerick Pass	12.60	12.90
16	Shelbourne Pass	13.49	14.15
<b>17</b>	Overland Pass No. 2	12.69	13.25
18	Robinson Summit	12.56	11.90
19	Conners Pass	13.87	11.50
20	+ Wheeler Camp GBNP	10.07	19.70
21	+ Little Antelope Summit*		11.85
22	Charnac Basin	12.58	
23			9.30
24	Kingston Creek	15.24	13.00
25	+ Wedertz Canyon*	<del></del>	NEW
25 26	+ Pine Nut Thompson Canyon		10.40
	+ Leviathan Aspen Grove, CA		11.60
27	+ Pine Grove Lobdell		8.00
28	Ione	10.97	MISSING
29	Currant Creek Summit	12.37	10.05
30	Wilson Creek Pass	16.14	10.55
31	Bunkerville Mountain	6.28	2.20
32	McCullough Pass	6.23	2.50
33	Cold Creek Canyon	16.27	12.50
34	Wheeler Pass	14.45	10.20
35	Lee Canyon	22.35	15.50
36	Adams Řanch	20.13	12.50
3 <i>7</i>	Spring Mountain Ranch	10.90	4.80
38	Kyle Canyon	19.90	14.20
39	Upper Williams Ranch	14.39	8.15
40	Roberts Ranch	13.72	9.05
41	+ Como-Rawe	10.72	9.80
42	+ Carroll Summit		
43	+ Risue Summit		15.25
44			8.80
45	+ Lucky Boy Pass*	<del>41.1111</del>	11.15
46	+ Clark Mountain South*		4.20
47	+ Lebo Spring Summit	*************	9.00
	+ Bald Mountain	Annual	8.45
48	+ Elbow West**	***************************************	4.40 (NOV-JULY)
49	+ Cloverdale Ranch**	***************************************	3.48 (NOV-JULY)
50	+ Scheelite Mine**		3.52 (NOV-JULY)
51	+ Slater's Mine	adinahahan yayab	NEW
52	+ Hinkey Summit		NEW
53	+ Tybo	All the same of th	NEW
54	+ Pete's Summit*	40 m v	NEW

State Climatology Office (Others-- State Department of Conservation and Natural Resources- Elko, Carson City, and Las Vegas Offices).
 8" SRG Can
 5" Plastic

